Summary of the Proposed Changes

The proposed revisions to the Ground Water Discharge Permitting Program Regulations (the "Ground Water Regulations"), 314 CMR 5.00, make a number of changes to streamline the existing permitting process and reduce the time it takes for an applicant to obtain a ground water discharge permit. The proposed regulations authorize the use of general permits, provide for administrative renewal of certain individual ground water discharge permits, and address two bottlenecks in the existing permitting process- the hydrogeological report and the financial assurance mechanism. To facilitate these streamlining changes, MassDEP is also revising 314 CMR 2.00, the provision of the regulations that establishes the procedures that applicants and the Department must follow when issuing permits. In addition to these streamlining changes, the proposed revisions to the Ground Water Regulations expand the list of activities that do not require a permit.

The proposed regulations also make a number of changes to streamline the Department's existing regulations and policies. The proposed changes incorporate several existing policies into the regulations, the Nutrient Loading Approach Policy, the Private Sewage Treatment Facility Policy, and the Policy Establishing the Regulatory Requirements for Closed Loop Geothermal Heat Pump Wells. The proposed regulations also provide that the Department may issue an individual ground water discharge permit that authorizes the reuse of effluent from permitted sewage treatment facilities in accordance with the proposed Wastewater Reuse Regulations, 314 CMR 20.00. This change eliminates the need for the Department's Wastewater Reuse Policy and allows the Department to issue one permit that authorizes a ground water discharge of effluent resulting from the treatment of sewage at a facility and the reuse of this effluent as reclaimed water.

In addition to 314 CMR 5.00, there is another set of regulations aimed at protecting ground water quality, specifically the Ground Water Quality Standards, 314 CMR 6.00. BRP is proposing changes to 314 CMR 5.00 that incorporate the provisions of this regulation that provide important protection to ground water quality. These changes eliminate the need for 314 CMR 6.00.

The Ground Water Regulations currently contain a list of specific effluent limits. These limits are based on the maximum contaminant limits set forth in the Drinking Water Regulations at the time the Department promulgated the Ground Water Regulations. To simplify the Regulations, the Department is eliminating the list of specific effluent limits and replacing the list with a requirement that except as otherwise provided, all discharges must meet the standards set forth in the Drinking Water Regulations.

The proposed regulations also incorporate a number of changes aimed at increasing protection of the public health and the environment. To promote recharge and keep water local, the proposed regulations eliminate the requirement to connect to a centralized sewer system, if it is available. When projects are proposed in stressed basins, developers will be able to discharge the wastewater from the proposed development on-site rather than transport it to another area in the basin or even another basin. To provide an extra margin of safety for existing drinking water sources, the proposed regulations establish more stringent effluent limitations for discharges within the Zone II or Interim Wellhead Protection Area of a public water supply.

The proposed regulations require individual or general discharge permits for new and increased ground water discharges of stormwater runoff from land uses with higher potential pollutant loads. By requiring a permit, the proposed regulations ensure that the Department's ongoing effort to promote increased stormwater recharge does not adversely impact the ability of the ground water to act as an actual or

potential drinking water source. Owners of sites with land uses with higher potential pollutant loads can avoid applying for an individual permit or coverage under a general permit by certifying to the Department that all such land uses are protected by a storm resistant shelter from exposure to rain, snow, snow melt and runoff. By providing this option, the proposed regulations encourage greater use of pollution prevention and source control measures.

The proposed changes provide the Department with new tools for dealing with two types of facilities that often have difficulty complying with the Ground Water Discharge Regulations-seasonal facilities and facilities run by contract operators. Because they shut down for six months or more, seasonal facilities frequently have difficulty meeting the effluent limitations in ground water discharge permits. The proposed revisions to 314 CMR 5.00 give the Department discretion to issue permits that take account of the special problems inherent in seasonal facilities. Throughout the Commonwealth, there are wastewater treatment facilities that are not properly operated and maintained by contract operators. Proposed revisions to 310 CMR 12.00 will make it clear that contractor operators are responsible for operating and maintaining the wastewater treatment facility in accordance with the approved operations and maintenance plan and staffing plan and for performing the monitoring, reporting, and recordkeeping required by the facility's discharge permit. When these changes take effect, MassDEP will be in a stronger position to take direct enforcement action against contract operators who fail to fulfill these important responsibilities.

The attached memo describes the proposed changes in greater detail.

Proposed Changes

Permit Streamlining

MassDEP is proposing a number of changes to the Ground Water Regulations that aim to streamline the existing permitting process. The proposed revisions authorize MassDEP to issue general permits and address two permitting bottlenecks-the review and approval of the hydrogeological report and the negotiation of the language of the financial assurance mechanism. These revisions will enable MassDEP to amend its fee regulations to shorten the current 320 day period for reviewing individual ground water discharge permit applications to 186 days for an individual permit application and 111 days for coverage under a general permit.[1]

Summary Of DEP Review Times

DEP Task	Application Without Deficiencies (days)	Application With Deficiencies (days)
Existing Permit Review including hydrogeologic review	**320**	**520**
Proposed Hydrogeo/General Permit	**111**	**162**
Proposed Hydrogeo/Individual Permit	**186**	**267**

DEP review times only. Does not include time for public notice period, applicant's preparation of hydrogeologic report or applicant response to DEP review comments

General Permits

The proposed regulations authorize the Department to issue general permits for several categories of discharges that warrant similar control measures including standard effluent limitations and monitoring requirements. Wastewater treatment facilities that are designed to treat less than 50,000 gallons of sewage per day will be eligible for a general permit provided that they do not impact a sensitive resource area such as a Zone II, an Interim Wellhead Protection Area, a sole source aquifer, a nutrient sensitive environmental area or impaired surface water. Other wastewater discharges that may be eligible for coverage under a general permit include discharges from the following activities: reject water from reverse osmosis treatment facilities, boiler blowdown with approved chemical additives, car washes, laundromats, wastewater from water purification plants, water treatment plant lagoons, and point source agricultural discharges.

Permit Bottlenecks

The proposed regulations address the two major bottlenecks in the ground water discharge permitting process- the hydrogeological evaluation and the financial assurance mechanism.

---

[1] These numbers assume that there are no technical or administrative deficiencies in the application.

Hydrogeological Evaluation.

The advisory committee advising the Department on the draft Ground Water Regulations recommended that the hydrogeological evaluation be reviewed separately in advance of the permit application. The proposed regulations adopt that recommendation.

Under the proposed approach, a proponent will file a separate application seeking review and approval of the hydrogeological evaluation and authorization to apply for an individual permit or coverage under a general permit. This separate process will include Department approval of the scope of work and the presence of DEP staff at the site at least once during the field investigation. This process will provide each applicant with the opportunity to obtain technical assistance from DEP before s/he submits the hydrogeological evaluation. BRP believes that this approach should make it less likely that applicants will have to revise or redo the hydrogeological evaluation report before it is approved. As a result, there should be fewer delays arising out of the review and approval of the hydrogeological evaluation.

Having a separate process for review and approval of the hydrogeological report has an additional advantage for permit applicants. It allows the applicant to know before s/he submits an application for a permit and before s/he commences design of the required treatment facilities how much flow can be accommodated at the proposed site and whether the discharge is eligible for coverage under a general permit. This provides project proponents with greater certainty than the existing permitting process.

Financial Assurance Mechanism

The proposed regulations incorporate the Private Sewage Treatment Facilities Policy. The proposed regulations require that all privately owned wastewater treatment facilities establish a financial assurance mechanism that provides for an immediate repair and replacement account. If the facility handles wastewater from at least some residential uses, a financial assurance mechanism that provides for a capital reserve account must also be created to accumulate funds for the replacement of the facility at the end of its reasonable expected useful life. To ensure that the financial assurance mechanism requirement is not a cause for delays in the permitting process, OGC is drafting a form Escrow Agreement and Standby Trust that must be used to create the required financial assurance mechanisms. By requiring applicants to use these form documents, the proposed regulations will eliminate the delays caused by negotiating the precise wording of the documents establishing the financial assurance mechanisms.

Activities Not Requiring a Permit

To reduce the regulatory burden, the proposed regulations expand the list of activities that do not require a permit, because they do not result in a discharge of pollutants that requires a permit. The proposed regulations incorporate the Department's policy on closed loop geothermal systems, eliminating the need for this policy. This policy exempts such systems from the requirement to obtain a permit provided that the system complies with certain conditions that prevent pollutants from entering the ground water. Similarly, the existing regulations require an individual permit for the discharge of non-contact cooling water, whenever the flow is over 2.000 gpd and the temperature does not exceed 40 degrees Celsius. The proposed regulations eliminate the permit requirement for all non-contact cooling water discharges, regardless of volume, provided the discharge does not exceed the temperature limit.

Administrative Renewal of Individual Permits

The Massachusetts Clean Waters Act provides that all permits issued under the Act shall expire within 5 years. The proposed regulations provide that the Department may administratively renew individual ground water discharge permits by extending the existing permit for an additional 5 year period, if (a) the permittee timely applies for renewal, (b) more stringent limits than those set forth in the existing permit are not necessary (i) to protect the ground water as an actual or potential source of drinking water (ii) to prevent the discharge from causing or contributing to a violation of the surface water quality standards, or (iii) to bring the permittee into compliance with the permit and the Ground Water Regulations and (c) a Massachusetts Registered Professional Engineer has inspected the treatment works and/or best management practices authorized by the permit and has certified to the Department in writing that if properly operated and maintained, the treatment works or best management practices should enable the permittee to comply with all the terms and conditions of the permit during the next five years. By creating the administrative renewal process, the proposed regulations should enable the Department to eliminate the backlog of pending applications for individual permit renewals.

Regulatory Streamlining

Elimination of 314 CMR 6.00

To streamline the regulatory scheme, BRP is proposing to eliminate the ground water classification scheme set forth in 314 CMR 6.00. This classification system is no longer needed, since the ground water in all but one small area of the state is classified as Class I,[2] suitable for use as a drinking water source. To protect all ground water as an actual or potential source of drinking water, the proposed regulations require that except as otherwise provided, all ground water discharges shall meet the more stringent of the water quality based effluent limits and the technology based limits set forth in the regulations. The water quality based effluent limits require that the discharge meet the maximum contaminant levels established by the Drinking Water Regulations, 310 CMR 22.00.[3] The technology-based limits require secondary treatment.

Special Effluent Limitations

In place of the classification system set forth in 314 CMR 6.00, the proposed regulations consider all ground water to be a potential drinking water source, unless after notice and opportunity for a public hearing, the Department determines otherwise. In that event, the Department may issue a ground water discharge permit with effluent limits less stringent than the water quality based standards and the technology based standards set forth in the Ground Water Regulations provided the Department

---

[2] The only area currently classified as Class III is the site of the existing Tri-Town Septage Treatment Facility in Orleans. Because the ground water in this area is not suitable for drinking water, the proposed regulations provide that the Tri-Town Septage Treatment Facility may continue to meet limits less stringent than the water quality based limits and the technology based limits set forth in the regulations unless the facility expands or unless the Department determines that more stringent limits are necessary to protect surface water quality.

[3] The proposed regulations also provide effluent limits for certain parameters for which the Drinking Water Regulations have not established a maximum contaminant limit and which are currently regulated by the Ground Water Regulations.

determines that the proposed discharge will not present an actual or potential public health hazard, will not cause the water quality of any public or private water supply to violate the standards set forth in the Drinking Water Regulations, and will not violate or contribute to a violation of the surface water quality standards. The proposed regulations identify two situations in which use of limits less stringent than the water quality based limits and the technology based limits will not adversely affect the public health, public or private water supplies, or surface water quality-seasonal facilities and facilities permitted under the Department's existing Nutrient Loading Approach Policy.

Seasonal Facilities

Seasonal facilities operate no more than six months each year. Because of problems associated with restarting these facilities, it is difficult for seasonal facilities to meet the more stringent of the water quality based standards and the technology based standards consistently throughout the entire period they are in operation. In light of these operational problems, the proposed regulations limit the discharge of pollutants to the total amount of pollutants that would be discharged, if the facility operated in compliance with the more stringent of the water quality based standards and the technology based standards throughout the year. For seasonal facilities located within the Zone II or Interim Wellhead Protection Area of a public water supply, the proposed regulations limit use of this provision to existing facilities.

Nutrient Loading Approach

The Nutrient Loading Approach Policy allows certain dischargers to meet the water quality based limit for total nitrogen and nitrate nitrogen of 10 mg/l at selected monitoring wells located at the property boundary rather than at the point of discharge. If the discharge is located in a Zone II, Interim Wellhead Protection Area, or a nutrient sensitive area, the Nutrient Loading Approach Policy provides that the discharge shall meet a limit for total nitrogen and nitrate nitrogen of 5 mg/l at selected monitoring wells located along the property boundary. The proposed regulations incorporate the Nutrient Loading Approach Policy. To provide an extra margin of safety for existing ground water sources, the proposed regulations limit use of this approach for discharges within a Zone II or Interim Wellhead Protection Area to existing facilities.

Elimination of List of Specific Effluent Limits

The Ground Water Regulations currently contain a list of effluent limitations that apply to ground water discharges. These limits are based on the drinking water standards in effect at the time the Department promulgated the Ground Water Regulations. The proposed regulations eliminate this list and replace it with a requirement that except as otherwise provided, a discharge to the ground water must meet the standards set forth in the Drinking Water Regulations.

Effluent Limits for Discharges within a Zone II or Interim Wellhead Protection Area

To provide a margin of safety for existing drinking water sources, the proposed regulations establish more stringent effluent limitations for discharges to the Zone II or Interim Wellhead Protection Area of a public water supply.

Wastewater Reuse

The proposed regulations authorize the Department to issue an individual ground water discharge permit authorizing the reuse in accordance with the proposed Wastewater Reuse Regulations, 314 CMR 20.00, of some or all of the effluent from a wastewater treatment plant that treats sanitary sewage. This change eliminates the need for the Department's Wastewater Reuse Policy. This change allows the Department to issue one permit that authorizes the discharge to the ground water of effluent that results from the treatment of sewage and/or the use, sale, distribution or offering for use, sale or distribution of this effluent as reclaimed water in accordance with 314 CMR 20.00.

Contract Operation

MassDEP proposes to amend 314 CMR 12.00 to list the responsibilities of contract operators. Contract operators will be required to operate, maintain and staff the facility in accordance with the approved operations and maintenance plan and staffing plan and to perform the monitoring, reporting, and recordkeeping required by the permit. This change allows the Department to take enforcement action against both the owner of the facility and/or the contract operator, if the facility if not properly operated and maintained, or if the required monitoring and reporting is not done.

Stormwater

The Department has revised the Stormwater Management Standards to require increased stormwater recharge of the ground water. The Department has also incorporated the revised Standards into the Wetlands Regulations, 310 CMR 10.00, and the Water Quality Certification Regulations, 314 CMR 9.00. To promote recharge of public water supplies, the revised Standards increase the required recharge volume and eliminate the practice of totally prohibiting the infiltration of stormwater runoff from all land uses with higher potential pollutant loads that are located within a Zone II or Interim Wellhead Protection Area. As revised, the Standards allow the infiltration of stormwater runoff from a land use with a higher potential pollutant load within a Zone II or Interim Wellhead Protection Area, in compliance with the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53 and the regulations thereunder including and the Ground Water Regulations, 314 CMR 5.00.

In response to the revised Stormwater Management Standards, BRP is proposing to revise the Ground Water Discharge Regulations to require an individual permit or coverage under a general permit for all new and increased discharges to the ground water of stormwater runoff from land uses with higher potential loads. By requiring a permit, the proposed regulations ensure that the Department's ongoing effort to increase ground water recharge does not adversely impact ground water quality. This protection is particularly important for projects located in the Zone II or Interim Wellhead Protection Area of a public water supply. Safe recharge is needed to ensure the sustainability of these drinking water sources.

Owners of sites that are the location of land uses with higher potential pollutant loads can avoid the requirement to obtain an individual permit or coverage under a general permit, if they certify to the Department that all such land uses are protected by a storm resistant shelter from exposure to rain, snow, snow melt, and runoff and the Department accepts this certification. By providing this option, the proposed regulations encourage owners of sites with land uses with higher potential pollutant loads to implement pollution prevention and source control measures.

To protect ground water quality, the Drinking Water Regulations require municipal water suppliers to enact land use controls that prohibit certain land uses in the Zone II of a new public water supply.

Consistent with the Dinking Water Regulations, the proposed revisions to the Ground Water Regulations provide that the Department will not issue a ground water a discharge permit for a new or increased discharges within the Zone II of stormwater runoff from a land use that the Drinking Water Regulations have identified as not suitable for a Zone II.

There are some stormwater discharges from land uses with higher potential pollutant loads that the Drinking Water Regulations do not identify as unsuitable for a Zone II. These discharges include stormwater discharges from gas stations with above ground tanks, high intensity use parking lots and fleet storage areas. MassDEP intends to issue general permits for such discharges including those discharges located within the Zone II. In lieu of effluent limits and monitoring requirements, the general permit will require the stormwater to meet the requirements of the Stormwater Management Standards and the Massachusetts Stormwater Handbook. The revised Massachusetts Stormwater Handbook identifies specific BMPs and pollution prevention measures for these land uses. These pollution prevention measures and BMPs are the same measures and BMPs required in Orders of Conditions under the Wetlands Protection Act.

This approach is a first step in applying the Stormwater Management Standards to projects that are located outside an area subject to regulation under the Wetlands Protection Act and that do not require a Water Quality Certification. By subjecting more projects involving land uses with higher potential pollutant loads to review for compliance with the Stormwater Management Standards, the proposed regulations increase ground water protection.